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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

EL HADY, NABIL M

ART UNIT

PAPER NUMBER

2154

DATE MAILED: 12/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/745,899

Applicant(s)

SHAW ET AL.

Examiner

Nabil M El-Hady

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/21/2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

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1. Claims 1-48 are pending in this application.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 23-25 and 36-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There is insufficient antecedent basis for these limitations:

- a) "said first determined number", claim 23, line 5, and claim 36, line 5;
- b) "said second determined number", claim 23, line 6, and claim 36, line 6;
- c) "said first and second determined numbers", claim 23, line 7, and claim 36, line 7.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 40, 41, 43-47 are rejected under 35 U.S.C. 102(e) as being anticipated by Burns et al. (US 6,275,496), hereafter "Burns".

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6. As to claim 40, Burns discloses the invention as claimed including a method for providing cached content to a user, comprising: receiving a request for content from a user (abstract; and col. 4, lines 39-41); and providing said requested content to said user from a cache (abstract; and col. 4, lines 31-41), wherein said requested content had been previously received from a content provider and stored in said cache (abstract; col. 4, lines 31-41; and col. 5, lines 8-10) in response to receiving a profile of said user by said content provider (col. 4, line 60 to col. 5, line 7; and 150, Fig. 5).

7. As to claim 41, Burns discloses said content relates to a bandwidth intensive application (col. 4, lines 29-31).

8. As to claim 43, Burns discloses said request for content is made by said user utilizing an Internet enabled device (58, 60, Fig. 2).

9. As to claim 44, Burns discloses said Internet enabled device is capable of accessing said content utilizing a broadband access mode (col. 3, lines 40-43).

10. As to claim 45, Burns discloses said broadband access mode is selected from the group consisting of an xDSL access, a cable access, a broadband wireless access, and an access over optical lines (col. 2, Table 1).

11. As to claim 46, Burns discloses providing said requested content to said user from said content provider if said content provider had previously not received said profile of said user (on-demand caching, col. 3, line 65 to col. 4, line 10).

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12. As to claim 47, Burns discloses said access provider is an Internet Service Provider (ISP) (col. 2, lines 66-67).

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 1-13, 42, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burns in view of Lin et al. (US 6,088,721), hereafter "Lin".

15. As claim 1, the claim is rejected for the same reasons as claim 40 above. In addition, Burns discloses receiving information from an access provider about one or more users, wherein said received information includes information about the content preference of said one or more users (col. 4, line 60 to line 5, line 7; and Fig. 5); and providing content to said access provider for caching (abstract; and col. 4, lines 31-41), wherein said provided content is based at least in part on said content preference of said one or more users (col. 4, line 60 to col. 5, line 7), and wherein said content is provided for to caching prior to receiving a request for said content from said one or more users (abstract; and col. 4, lines 36-38).

16. Burns discloses providing content to said access provider for caching in the access provider and not necessarily for caching in close proximity to said one or more users. However, it is well known in the art that the essence of caching technology is to cache a request in close

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proximity to the user. Lin, for example, discloses selecting caches of contents close to the user (col. 3, lines 46-48). It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Burns and Lin because Lin's method would provide information to points close to the user resulting in avoiding both source overloading and network overloading (see Lin, col. 3, lines 62-63).

17. As to claim 2, the claim is rejected for the same reasons as claim 1 above.

18. As to claims 3-9, and 42, Burns discloses said content relates to a bandwidth intensive application (col. 4, lines 29-31). It is well known, and would have been obvious to one skilled in the art at the time of the invention that such bandwidth intensive applications may comprise a real-time application, a multi-user real-time application, an interactive movie, an interactive television show, an interactive commerce, a video on demand, and/or any that relates to an entertainment service such as online gaming.

19. As to claim 10, Burns discloses said content is provided by a content provider (52, Fig. 2).

20. As to claim 11, Burns discloses said content is stored in a cache associated with said access provider (Fig. 2).

21. As to claims 12, 13, and 48, Burns discloses said access provider is an Internet Service Provider (ISP) (col. 2, lines 66-67). However, it is well known in the art that access networks

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which would be an Internet service provider (ISP) or a local exchange carrier (LEC), is used to provide both data and voice access over the public IP network

22. Claims 14-26, 33-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burns in view of Humphrey (US 2002/0129116).

23. As to claim 14, the claim is rejected for the same reasons as claim 40 above. In addition, Burns discloses transmitting said similar content accessed by said one or more users to said access provider for storage in a cache associated with said access provider (abstract; col. 4, lines 31-41; and col. 5, lines 8-10) prior to receiving a request by said one or more users for said similar content (abstract; col. 4, lines 31-41; and col. 5, lines 8-10).

24. Burn, however, does not explicitly disclose determining the number of said one or more users frequently accessing similar content and transmitting said content to said access provider if said determined number is greater than a threshold number. Humphrey, on the other hand, discloses determining the number of said one or more users frequently accessing similar content and transmitting said content to say access provider if said determined number is greater than a threshold number ([0046], [0049], [0052]-[0054], and Figs. 4 and 5). It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Burns and Humphrey because Humphrey's method would enhance the network performance by taking care of an engineering tradeoff in the conventional cache design, that is a cache is more useful at improving latency at the edge of the network (near user), but may have lower hit rate when the size of the cache community is small (see, Humphrey, [0010]).

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25. As to claim 33, the claim is rejected for the same reasons as claim 14 above.

26. As to claims 15-18, Burns discloses the received information further includes a profile of said one or more users, including information relating to on-line behavior of said one or more users, information relating to on-line interests of said one or more users (col. 4, line 67 to col. 5, line 2). Burns, however, does not explicitly disclose said profile includes information comprising the age, the gender, and the geographical location of said one or more users. It is well known, and would have been obvious to one skilled in the art at the time of the invention that such information like age, the gender, and the geographical location may also be detected and passed as part of the user profile.

27. As to claims 19 and 34, the claims are rejected for the same reasons as claims 14 and 33 above. In addition, Humphrey discloses receiving information about one or more users from a second access provider, wherein said one or more users are associated with said second access provider; and determining the number of said one or more users associated with said second access provider frequently accessing said similar content ([0046], [0049], [0052]-[0054], and Figs. 4 and 5).

28. As to claims 20-22, Burns discloses said access provider is an Internet Service Provider (ISP) (col. 2, lines 66-67). However, it is well known in the art that access networks which would be an Internet service provider (ISP) or a local exchange carrier (LEC), is used to provide both data and voice access over the public IP network.

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29. As to claims 23 and 36, the claim is rejected for the same reasons as claims 14 and 33 above. In addition, Humphrey discloses transmitting said similar content to be stored at a location for access by said one or more users of said first ISP and said one or more users of said second ISP prior to receiving a request by said one or more users for content, wherein said content is transmitted if said first determined number is not greater than said threshold number and said second determined number is not greater than said threshold number but the sum of said first and second determined numbers is greater than said threshold number ([0046], [0049], [0052]-[0054], and Figs. 4 and 5).

30. As to claims 24, 25, 37, and 38, Burns discloses said content is stored in a cache associated with said access provider (Fig. 2).

31. As to claims 26 and 39, Burns discloses said content relates to a bandwidth intensive application (col. 4, lines 29-31). It is well known, and would have been obvious to one skilled in the art at the time of the invention that such bandwidth intensive applications may relates to an entertainment service such as online gaming.

32. As to claim 35, Burns discloses said access provider is an Internet Service Provider (ISP) (col. 2, lines 66-67).

33. Claims 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burns in view of Lin as applied to claim 1 above, and further in view of Humphrey.

34. As to claim 27, the claim is rejected for the same reasons as claims 1 and 14 above.

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35. As to claims 29 and 31, Burns discloses said content is stored in a cache associated with said access provider (Fig. 2).

36. As to claims 28 and 30, Burns discloses said access provider is an Internet Service Provider (ISP) (col. 2, lines 66-67).

37. As to claim 32, Burns discloses said content relates to a bandwidth intensive application (col. 4, lines 29-31). It is well known, and would have been obvious to one skilled in the art at the time of the invention that such bandwidth intensive applications may relates to an entertainment service such as online gaming.

38. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Medina, Jr. (US 6,370,571); Wang (US 6,112,279); Lin et al. (US 6,405,256); Armbruster et al. (US 6,243,760); Chen et al. (US 6,389,510); Dutta (US 6,658,462); Berstis et al. (US 6,510,458); Tso et al. (US 6,047,327); Perlman et al. (US 5,978,381); and Sarrukai (US 6,775,695).


39. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nabil M El-Hady whose telephone number is (571) 272-3963. The examiner can normally be reached on 9:00 - 4:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

December 5, 2004


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Primary Patent Examiner
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